

AMENDMENTS TO THE CLAIMS

1. (currently amended) A chemical dispenser (500) for use with a flush toilet having a water storage tank (520) through which water is flushed, said ~~For use with a flush toilet, a~~ chemical dispenser including:
an airtight chemical storage chamber (501) for a chemical which is desired to be added to the flushing water of the toilet;
mounting apparatus fabricated to allow said chemical dispenser to be readily mountable on an existing opening in the water storage tank of the toilet; and
a dispensing mechanism operative to dispense a predetermined quantity of the chemical into the flushing water of the toilet each time the toilet is flushed, [[.]]
said mechanism comprising:
a dispensing cup (529);
a vertical chemical transfer tube (535) having a cup end and a chamber end allowing fluid communication between said chemical storage chamber (501) and said dispensing cup (529);
an air tube (545) having a tank end and a cup end, extending from the dispensing cup (529) to the toilet tank (520); and
a chemical exit tube (525) extending from said dispensing cup (529) into the toilet tank (520) allowing a predetermined quantity of the chemical to flow from said dispensing cup (529) into the toilet tank (520) as water refills the tank after flushing, and
wherein air trapped in said air tube (545) and the upper portion of said dispensing cup (529) is compressed as the water level in the toilet tank (520) rises above the tank end of the air tube (545) while the tank is refilling after flushing and the resultant increased air pressure in said cup (529) drives the predetermined quantity of chemical in said cup into the toilet tank (520) via said chemical exit tube (525) until the level of said chemical is below said cup end of said transfer tube (535), and

wherein after said predetermined quantity of said chemical is emptied into the toilet tank (520), air in the cup (529) rises through said transfer tube (535) into said chemical storage chamber (501) forcing additional chemical to flow from said chamber (501) through said transfer tube (535) and refill said dispensing cup (529) until said cup end of said transfer tube (535) is immersed in chemical, thereby preparing said cup (529) for dispensing another predetermined quantity of chemical into the toilet tank (520) after flushing.

2. (cancelled)
3. (cancelled)
4. (cancelled)